

Can Science Bring Captain Scott Back to Life

An Eminent French Scientist Declares This Apparent Miracle Can Be Accomplished and Offers His Own Body to Test His Method Which Is Supported by Many Facts and Experiments

WHEN Clark Russell wrote his famous novel, "The Frozen Pirate," most people probably regarded it as a fantastic dream that a man frozen stiff should come to life again.

But now scientists declare that this bold flight of the imagination goes little farther than occurrences that are constantly taking place in nature, and that many animals and possibly men may come to life again after being frozen solid like a block of ice.

It is even suggested that the bodies of Captain Scott and his brave companions, who perished on their way back from the South Pole, may be recovered and brought to life again by scientific treatment. In theory, at least, there seems a possibility that this may be done.

Dr. August de Castellane Seymore, a nobleman of scientific training, proposes a method by which, he declares, the bodies of Captain Scott and his companions may be revived. The doctor, who is of mixed French and Danish parentage, is now living at New Rochelle, N. Y.

"The possibility of bringing animals to life after they have been frozen has already been demonstrated," said Dr. Seymore, "but I have devised a technique that will permit the thawing out of frozen human beings with positive assurance of success."

"I have prepared a fluid which if injected into a frozen body after it has been thawed out, will make the return to life safe and certain. I cannot give all the details of the composition just now, but am willing to submit it to a physician of standing."

"Furthermore I offer my own body as a test of the efficacy of this fluid. I am willing to be put into cold storage for one or one hundred years, and I am looking for a reputable physician who will carry out the experiment on me according to my directions."

"The bodies of Captain Scott and his companions, if brought back to civilization in a frozen condition could be revived. The captain and his three companions were found frozen stiff in their tents nearly eight months after their death. The captain was sitting with his back against the tent pole. The bodies were in perfect condition."

"They were left as they lay. In fact, they were frozen so stiff it would have been impossible to change their attitude. A snow hill was built over them and a memorial cross placed over this."

"Perhaps a solid block of ice will have formed around Captain Scott before he can be recovered. In any case, it will be necessary to put the body in a refrigerator, keeping it below freezing point, if my treatment is to be applied."

"I have already tried this treatment upon my dog with complete success. In bringing back a human subject to life an important part of the method would be the injection of a large quantity of blood from a man in good health."

"In the course of my scientific studies I observed that snakes, toads, bats, lizards and vipers—all cold-blooded animals—hibernate; that they partake of no food; that digestion ceases entirely and respiration is greatly reduced, while the other functions of nature during this period of winter sleep, are entirely suspended."

"I also observed the same to be true of warm-blooded animals, the bear, squirrel, rabbit, possum and coon, etc., although they do not freeze, as do the former."

"I studied this subject of suspended animation. I came across the case of a toad that had been imbedded in a rock for at least 200 years, without air, without food, in a temperature below 32. I had in the meantime experimented with various animals of various sizes and kinds. I found that hibernating bats could remain in water for hours and yet live!



"Captain Scott was buried as he was found, sitting against the pole of his tent, his body frozen stiff as iron, and when it is recovered it will probably be found enclosed in a block of ice."



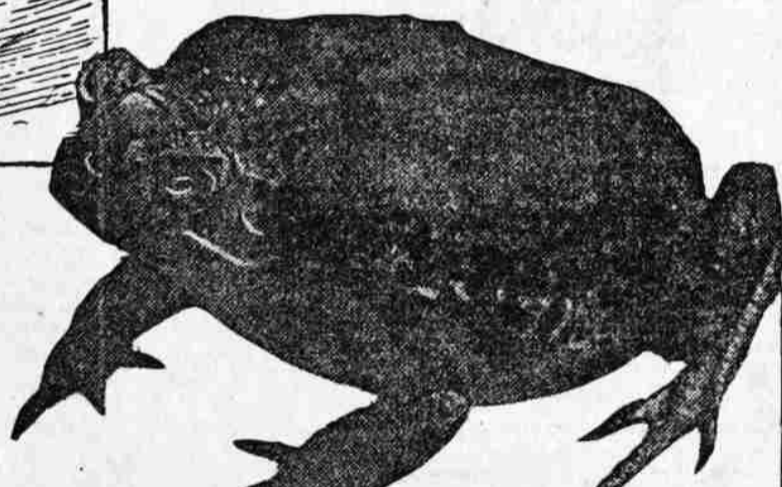
The Late Captain Scott, Caught in the Antarctic Blizzard, Which Caused the Death of Himself and his Companions. One of a Remarkable Series of Sketches Made by Dr. E. A. Wilson, One of Captain Scott's Party, During their Last Journey.

bottom of Blue Lake. There was a film of yellow weed covering the gravel of which the bottom was composed, and on this weed several kinds of rotifers were found alive. This fact seemed more remarkable later, when we found that Blue Lake did not melt during the two summers that we spent at Cape Royds. This means that the animals must be capable of remaining frozen for years, possibly for many years, without being killed.

"To test the degree of cold which they could stand, blocks of ice were cut from

Swiss chemist, has recently proved that fish could be frozen and brought to life again. He suggested the possibility of producing the same conditions with the warm-blooded animals.

Professor Richard Muirhead, the English biologist, in his "Studies of Vital Endurance," has collected many cases of lower animals that have been frozen and restored to life. He caused several gold fish to be frozen in a solid cake of ice. At the end of a week he dug two out. One he broke to pieces as if it were just a cake



A Frog Brought to Life After Being Frozen All Winter in Professor Pictet's Experiments.

ing and restoration. I tried it on possums, next on cats, and finally on a dog. The first were failures, but my dog survived the ordeal. Then I perfected my fluid, and it is with the assistance of this fluid that I expect to reanimate the human body, aided by heat, massage, the pulmotor and the Elsemenger method of artificial breathing."

In addition to Dr. Castellane Seymore's experiments, there is an abundance of scientific evidence regarding the preservation of life and animal tissues at low temperatures. These range from the cases of suspension of life in lower animals, such as frogs and fishes, to the extraordinary preservation of the tissues in a prehistoric mammoth 20,000 years old, found enclosed in a block of ice. The important point, however, is that it has never been proved that life can be suspended by freezing and then restored in man or the warm-blooded animals.

Perhaps the most interesting recent observations concerning the suspension and restoration of life were made by Sir Ernest Shackleton, Captain Scott's former lieutenant. Shackleton found that the little insects called "rotifers" and "water bears" were capable of remaining alive indefinitely when frozen. In his book, "The Heart of the Antarctic," Shackleton writes:

"As soon as the animals were obtained from the weed enclosed in the ice in the manner described above, it was obvious that mere freezing did not kill them. They were first got in the shallow lakes, where the weed could be seen through the transparent ice at the margins. There were plenty in all the shallow lakes. A shaft was sunk

the lakes and exposed to the air in the coldest weather of the whole winter. By boring into the centre of the blocks we found that they were as cold as the air. A temperature of minus 40 degrees Fahr. did not kill the animals."

"Then they were alternately frozen and thawed weekly for a long period, and took no harm. They were dried and frozen, and thawed and moistened, and still they lived. At last they were dried, and the bottle containing them was immersed in boiling water, which was allowed to cool gradually, and still a great many survived. Again they were put into sea water, and into the brine from the bottom of Green Lake, which is so salt that it only freezes at about zero (Fahr.). They were left in these salt waters for a month, yet as soon as they were transferred to fresh water they began to crawl about as though nothing had happened."

"Such is the vitality of these little animals that they can endure being taken from ice at a minus temperature, thawed, dried and subjected to a temperature not very far short of boiling point, all within a few hours (a range of more than 200 degrees Fahr.). It is not the eggs merely that survive all these changes, but the grown animals. These are animals comparatively high in the scale. The rotifers are worms, and the water-bears (which stood the same tests) are cousins to the insects and spiders."

"It is a curious fact that these animals, which can endure such extremes of heat and cold, and other unfavorable conditions, readily die when left in cold water at a moderate temperature."

Professor Raoul Pictet, a well-known

How Professor Muirhead Kept a Frog Without Air for Six Months to Test His Theories of Frozen Life.



How Captain Scott and His Companions Hauled Their Own Supplies to the South Pole.

Sketch by Dr. E. A. Wilson.



The Pulmotor Will Be Used in Dr. A. de Castellane Seymore's

Method of Bringing a Frozen Man to Life.

of ice. The other was quickly thawed and immediately began to swim about if nothing had happened to it. When the fish were restored to life at the end of a year.

Frogs have been found frozen in a cake of ice and when released have been about as merry as ever. These creatures have also been found imbedded in a cake of mud for a long period and been alive when released. It is asserted that they have lived when encased in a piece of petrified stone from an geological period.

Now it is proved that frozen arrests decomposition in the case of man and the warm-blooded animals, as well as in those of lower animals. Decomposition is an accompaniment of life and process that arrests decomposition but does not destroy the possibility of it may merely arrest life without destroying it. That is what takes place in the lower animals, but in the warm-blooded animals it seems that at some point in the freezing or thawing process life is stopped.

We see the possibility of partially suspended animation among higher animals in those that hibernate. In these creatures digestion ceases and breathing is practically at a standstill. It is only a short of the frog living in its state of ice.

It remains quite possible that a mammal frozen alive really lives but loses its life during the cruel process of thawing. Can a bridge over this gap in the continuous life current? This is the question that Dr. August de Castellane Seymore professes to have answered. It is one that must interest all scientists.



The Late Captain Scott in the Marching Equipment He Wore on His Journey to the South Pole. Sketch by Dr. E. A. Wilson.

Feeling Your Pulse by Telegraph

A WONDERFUL instrument has been perfected, called the "electro cardiograph," by means of which a physician is able to see and count the patient's heart

beats from a distance of a mile or more.

The progress of several common diseases is plainly indicated by the frequency and force of the patient's heart beats. By the use of this new instrument a doctor, while sitting in his office, may watch the progress of the diseases of several patients, hour by hour, and so avoid unnecessary personal visits.

This instrument is, in effect, a heart telephone, which shows the doctor to the minutest fraction of a second how the heart is beating. In the hospital ward the patient places each hand in a dish of salt water, to which conducting wires are connected with the instrument in the laboratory.

Every time the heart beats it produces an electric current, and this current is conducted to a fine thread suspended between the poles of a very powerful electro-magnet. The thread is so thin as to be almost invisible to the naked eye. It is made from drawn glass and is 7-1,000 of a millimetre in diameter.

As the patient puts his hands in the dish of salt water by the bedside the action of the heart is electrically telegraphed to the thread, which is deflected with every heart beat.

On the principle of the magic lantern—the thread is practically the "slide"—a powerful arc light throws the thread's magnified reflection on a screen, and by a cunning contrivance it is automatically photographed on a moving plate. In this way an "electro-cardiograph," or heart beat picture, is obtained.

"It is possible," said a doctor who explained the apparatus, "to record heart beats a mile distant. Indeed, I think it might be possible to bring the telephone into use and record the throbbing of the heart over greater distances."

Some interesting experiments have been made by the authorities at a London Hospital. An elephant was taken into the yard and made to stand with his feet in hip baths of the salt solution while his heart beats were photographed in a room upstairs. The cardiograph showed that his heart was beating forty times to the minute.

A rat was also experimented on,

with small glass dishes for his heart beat 600 times in a minute. The normal heart beat of a man being is at the rate of sixty to seventy.

The London Hospital is forming a heart department, under the direction of that eminent heart specialist, Dr. James Mackenzie, who said recently:

"The cause of the East End not phthisis, but rheumatism, attacks young people early because of their weakened condition of their unhealthy way of living. Rheumatism comes the rheumatic heart, and the younger they get their first attack of rheumatism the more likely is the heart to be affected."

"Thus there are thousands of 'heart' patients, who form the army of 'unemployables.' It is a grave social problem that we have to tackle by the establishment of highly specialized 'heart department' which will investigate and study the question of the heart here is a field that is open for research."

"There are many mysterious connections with heart patients. One night you may find every heart patient sitting up in bed because with difficulty, and may never know the exact reason why this particular night should affect all patients the same way."

"Up to the present Dr. Mackenzie has had twelve beds here, and been extremely successful in the treatment of heart cases. The number is so great that we have decided to form a special department, a heart-outpatients' department, a heart-outpatients' department, a heart-outpatients' department."

The electrocardiograph does not transmit the patient's heart beats to the physician's eye, but a considerable distance. It is their force and frequency on a prepared paper, thus recording the progress of the case. The instrument is thus a saver of the doctor's time, especially during epidemics of the disease which occur nearly every year in New York as well as in London. A disease which rarely kills, but is a troublesome one, the intermittent fever and the weak heart action which accompany it.